

**AGRICULTURAL RESOURCE
MANAGEMENT SURVEY
CORN
PRODUCTION PRACTICES and
COSTS REPORT
for 2005**

RESPONDENT BOOKLET

Section B, item 14**SEED TYPE CODE LIST**

- | | |
|--|--|
| 1 Genetically-modified herbicide resistant seed variety
(e.g. <i>LibertyLink; Roundup Ready</i>) | 6 Stacked gene variety with both genetically-modified Bt-ECB and herbicide resistant
(e.g. <i>YieldGard + Roundup Ready</i>) |
| 2 Non-genetically-modified herbicide resistant seed variety
(e.g. <i>IMI-corn</i>) | 7 Stacked gene variety with both genetically-modified Bt-CRW and herbicide resistant
(e.g. <i>YieldGard Rootworm + Roundup Ready</i>) |
| 3 Genetically-modified Bt variety for insect resistance to control European Corn Borer (Bt-ECB)
(e.g. <i>YieldGard, NatureGard, Knockout</i>) | 8 Triple stacked gene variety with genetically-modified Bt-ECB and Bt-CRW plus herbicide resistant
(e.g. <i>YieldGard Plus + Roundup Ready</i>) |
| 4 Genetically-modified Bt variety for insect resistance to control the corn rootworm (Bt-CRW)
(e.g. <i>YieldGard Rootworm</i>) | 9 None of the above |
| 5 Stacked gene variety with both genetically-modified Bt-ECB and Bt-CRW (e.g. <i>YieldGard Plus</i>) | |

Section B, item 16**REASONS FOR NOT PLANTING Bt SEED VARIETY**

- 1 Did not expect to have enough corn borers and/or corn rootworms to justify the cost of Bt corn.
- 2 Concerned about finding a market for Bt corn.
- 3 This field was used as refuge in 2005.
- 4 Concerned about the environmental impact of Bt corn.
- 5 Not aware of Bt Seed.
- 6 Other, Specify.

Section B, item 17**REASONS FOR RESISTANT SEED VARIETY**

- 1 Increase yields through improved pest (weed or insect) control?
- 2 Decrease pesticide input costs?
- 3 Decrease machinery costs?
- 4 Improve ability to use or ease of using reduced tillage or no-till system?
- 5 Improve ability to use or ease of rotating crops?
- 6 Save management time or labor or improve ease of management?
- 7 Adopt more environmentally friendly practices?
- 8 For some other reason?

Section B, item 33**FEDERAL CROP INSURANCE COVERAGE**

- 1 **Basic Catastrophic Insurance (Federal CAT)** bought for a flat fee and protects against crop loss greater than 50% of average yield, at 55% of the price.
- 2 **Buy-up Above Basic Federal CAT** for higher levels of yield and price protection (*such as 65% of yield and 100% Price, multi peril crop insurance*).
- 3 **Revenue Insurance** include Income Protection (IP), Crop Revenue Coverage (CRC), and Revenue Assurance (RA).
- 4 **Other Federal Crop Insurance (Group Risk Plan, Adjusted Gross Revenue, Group Risk Income Protection, etc.).**

Section C, Column 6 & Section D, Column 9**FERTILIZER/PESTICIDE APPLICATION METHODS**

- 1 Broadcast, Ground without incorporation
- 2 Broadcast, Ground with incorporation
- 3 Broadcast, by aircraft
- 4 In seed furrow
- 5 In irrigation water
- 6 Chisel/injected or knifed in
- 7 Banded/sidedressed in or over row
- 8 Foliar or directed spray
- 9 Spot treatments (**Section D only**)

Section C, item 4

Common Fertilizers and Their Percent Analysis

[Enumerator Note: If Respondent cannot report the formulation for Section C, item 4, use the formulations below.]

Name	Form	N	P ₂ O ₅	K ₂ O	S
Ammonia	D/L	80	---	---	---
Ammoniated superphosphate.	D	12-17	22-35	---	---
Ammonium metaphosphate.	D	12	51	---	---
Ammonium nitrate.	D	32-34	---	---	---
Ammonium phosphate.	D	11-18	46-48	---	---
Ammonium phosphate nitrate.	D	27-30	10-15	---	---
Ammonium phosphate sulfate (APS).	D	13-16	20	---	15
Ammonium polyphosphate (APP).	L	10-11	34-37	---	---
Ammonium polysulfide (Ammonium Sulfate).	L	20-21	---	---	24
Ammonium sulfate nitrate.	D	20-30	---	---	5
Ammonium thiosulfate solution.	L	12	---	---	26
Anhydrous ammonia.	L/G	82	---	---	---
Aqua ammonia (Ammonium Hydroxide).	L	16-25	---	---	---
Bone meal.	D	0-2	10-20	---	---
Calcium ammonium nitrate.	D	15-16	---	---	---
Diammonium phosphate sulfur.	D	15-16	39-41	---	---
Diammonium phosphate (DAP).	D	16-21	46-53	---	---
Elemental sulfur.	D	---	---	---	52-100
Greensand.	D	---	1	6	---
Magnesium sulfate.	D	---	---	---	13
Mixed fertilizer.	D	2	6	12	---
		3	9	18	---
		3	10	30	---
		5	10	15	---
		5	10	30	---
		5	15	30	---
		8	24	24	---
		9	18	9	---
		10	34	---	---
Monoammonium phosphate (MAP).	D	11-13	48-62	---	---
Natralene	D/L	40	---	---	---
Nitrogen solutions.	L	7-58	---	---	---
Nitric phosphate.	D	12-17	22-35	---	---
Phosphate rock.	D	---	2-35	---	---
Phosphoric acid.	L	---	2-76	---	---
Potassium carbonate.	D	---	---	34-48	---
Potassium chloride (Muriate of potash).	D	---	---	60-62	---
Potassium magnesium sulfate.	D	---	---	22	23
Potassium metaphosphate.	D	---	55-57	37-38	---
Potassium nitrate.	D	13	---	44	---
Potassium orthophosphate.	D	---	30-60	30-50	---
Potassium polyphosphate.	L	---	40-60	22-48	---
Potassium sodium nitrate.	D	15	---	14-15	---
Potassium solutions.	L	---	---	13-15	---
Potassium sulfate.	D	---	---	50-53	16
Sodium nitrate (Nitrate of Soda).	D	15-16	---	---	---
Sulfuric acid.	L	---	---	---	20-26
Super phosphate (22% & under).	D	---	16-22	---	11
Super phosphate (over 22%).	D	---	23-39	---	11
Triple super phosphate.	D	---	40-54	---	11
Urea.	D	45-46	---	---	---
Urea, sulfure coated.	D	36-38	---	---	13-16
Urea ammonium phosphate.	D	25-58	28-35	---	---
Urea ammonium nitrate (UAN).	L	28-32	---	---	---
Urea phosphate.	D	17	44	---	---

CHEMICALS and PESTICIDES for Corn, All

F = Fungicide; **H** = Herbicide; **I** = Insecticide; **M** = Misc. Other; **MD** = Defoliant/Dessicant; **MG** = Growth Regulator

AS = Aqueous Suspension, **D** = Dust, **DF** = Dry flowable, **DG** = Water-Dispersible Granules, **E** or **EC** = Emulsifiable Concentrate, **ES** = Emulsifiable solution, **F** or **L** = Flowable, **G** or **GR** = Granular, **L** = Liquid, **LV** = Low volatility, **M** or **ME** = Microencapsalted, **P** = Pellets, **S** = Solution, **SL** = Slurry, **SP** = Soluble powder, **W** or **WP** = Wettable powder, **WDG** or **WG** = Water-Dispersible Granules, **WSP** = Water-soluble packet

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
L	H	4351	2,4-D/Agsco 400 EC	D	H	4652	Balance WDG
L	H	4758	2,4-D Amine	L	H	4823	Balance Pro
L	H	4377	2,4-D/Amine 4	L	H	4136	Banvel 4L
L	H	4664	2,4-D/Amine 6	L	H	4327	Banvel SGF 2 EC
L	H	4203	2,4-D/Esterone 6E	L	H	4617	Banvel + 2,4-D
L	H	4291	2,4-D/Formula 40	L	H	4676	Banvel-K + Atrazine
L	H	4480	2,4-D/LV 6	L	H	4808	Barrage
L	H	4562	2,4-D/Riverside LV4	D	H	4521	Basis WDG
L	H	4265	2,4-D/Salvo	D	H	4611	Basis Gold WDG
L	H	4004	2,4-D/Weedar 64A	L	I	1246	Baythroid 2 (EC)
L	H	4296	2,4-D/Weedone 638	D	H	4140	Beacon 75 DF
L	H	4298	2,4-D/Weedone LV4	L	H	4637	Bicep II Magnum
L	H	4299	2,4-D/Weedone LV6	L	H	4638	Bicep Lite II Magnum
				L	H	4884	Buccaneer Herbicide
L	H	4006	AAtrex 4L	L	H	4024	Buctril 2 EC
D	H	4008	AAtrex Nine-O WP	L	H	4025	Buctril 4 EC
D	H	4339	Accent 75 DG	L	H	4026	Buctril + Atrazine (1+2 EC)
D	H	4648	Accent Gold	L	H	4027	Bullet 4 EC
D	H	4683	Aim				
L	H	4879	Aim EC				
L	H	4880	Aim EW/Avalanch				
L	I	1004	Asana XL .66 EC				
L	H	4041	Atrazine 4 L				
D	H	4044	Atrazine 90 DF				
D	I	4651	Axiom DF				
D	I	1468	Aztec 2.1 Granula				
D	H	1971	Aztec 467 %Granular				

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
L	H	4847	Callisto 4L	L	I	1720	Empower
L	H	4896	Camix	D	H	4749	Epic
D	H	4610	Canopy XL	D	H	4973	Equipcorn Herbicide
L	I	1140	Capture 2 EC	L	H	4206	Extrazine 4 L
D	H	4690	Celebrity	L	H	4756	Extreme
D	H	4799	Celebrity Plus				
L	H	4887	Cinch ATZ	L	H	4642	Field Master
L	H	4469	Clarity 4 L	D	I	1440	Force 3 G
L	I	1401	Comite II	D	I	1678	Fortress 2.5 G
L	H	4173	Confidence 4EC	D	I	1397	Fortress 5 G
L	H	4872	Cornerstone	L	H	4448	Frontier 6.0
D	I	1009	Counter 15 G	L	H	4597	Fultime Herbicide
D	I	1241	Counter 20 CR	L	I	1054	Furadan 4 F
				D	I	1053	Furadan 15 G
D	H	4849	Define	L	I	1374	Fury 1.5 EC
L	H	4803	Degree Xtra				
L	I	1041	Diazinon 4 E	L	H	4882	Gly Star Plus
D	I	1050	Diazinon 50 W	L	H	4580	Glyfos X-TRA
L	H	4866	Dicamba SG	L	H	4840	Glyphomax/Glyphomax Plus
L	I	1028	Dimethoate 2.67EC	L	H	4890	Glyphosate 4
L	I	1029	Dimethoate 4 EC	L	H	4838	Glyphosate Original
D	H	4040	Direx 80 DF	L	H	4886	G-Max LHE
D	H	4677	Distinct	L	H	4314	Gramoxone Extra 2.5 L
L	H	4534	DoublePlay	L	H	4654	Gramoxone Max/Cyclone Con
L	H	4660	Dual II Magnum	L	H	4064	Gramoxone Super 1.5 L
L	H	4661	Dual II Magnum SI	L	H	4494	Guardsman Herbicide
D	H	4753	Dual IIG Magnum	L	H	4852	Guardsman Max
L	H	4629	Dual Magnum				

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
D	H	4139	Harmony Extra DF	L	I	1363	Mustang
L	H	4602	Harness	L	I	1895	Mustang Max
D	H	4650	Harness 20 G				
L	H	4529	Harness Xtra	D	H	4692	NorthStar
L	H	4649	Harness Xtra 5.6 L	D	I	1546	Nufos 15 G
L	H	4955	Helosate Plus				
L	H	4222	Honcho	D	H	4860	Option
D	H	4517	Hornet	L	H	4138	Oracle Dicamba Agricultural Herbicide
D	H	4861	Hornet WDG	L	H	4862	Outlook
L	I	1863	Intrepid 2F	L	I	1115	Parathion 8 E
				L	H	4813	Pendimax 3.3
L	I	1252	Karate 1 EC	L	I	1902	Permethrin 3.2 AG
L	H	4888	Keystone	D	H	4525	Permit 75 DF
				L	I	1884	Perm-Up
L	H	4230	Lariat 4 F	L	MG	9137	PGR-IV
L	H	4069	Lasso 4 EC	D	I	1105	Pounce 1.5 G
L	H	4665	LeadOff	L	I	1107	Pounce 3.2 EC
L	H	4640	Liberty	D	I	1106	Pounce 25 WP
L	H	4678	Liberty ATZ	L	H	4084	Princep 4 L
D	H	4607	Lightning DG	D	H	4249	Princep Caliber 90
L	H	4074	Linex 4 L	L	H	4360	Prowl 3.3 EC
L	I	1069	Lorsban 4E	L	H	4255	Pursuit Plus EC
L	I	1434	Lorsban 4 E-HF	D	H	4646	Python WDG
D	I	1068	Lorsban 15 G				
D	I	1070	Lorsban 50W				
L	H	4885	Lumax				
L	H	4826	LV 400 2,4-D Weed Killer				
L	I	1228	Malathion 8				
L	H	4235	Marksman				
L	H	4231	Micro-Tech				
L	H	4491	Mirage 4 EC				

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
L	I	1552	Regent 4 SC	D	I	1127	Thimet 20 G
D	I	1532	Regent 80 WG	L	H	4530	TopNotch
L	H	4527	Resource	L	H	4848	Touchdown IQ
L	H	4700	Roundup Custom	L	H	4662	Touchdown 5
L	H	4093	Roundup Original	L	H	4450	Trifluralin 4 EC
L	H	4315	Roundup Original RT	D	H	4871	Valor
L	H	4561	Roundup Ultra	L	H	4893	Volley ATZ Lite
L	H	4763	Roundup Ultra Max	L	I	1435	Warrior with Zeon
L	H	4881	Roundup Weather Max	L	I	1553	Warrior T
L	H	4857	RT Master	L	H	4003	Weedar 64
L	H	4846	Salvan (Cornbelt)	D	H	4858	Yukon Herbicide
L	H	4845	Salvo	L	H	4048	Simazine 4 L
D	H	4049	Simazine 80 W	D	H	4342	Simazine 90 DF
L	H	4396	Sim-Trol 4L	L	H	4641	Spirit
D	H	4641	Spirit	D	H	4845	Steadfast
D	H	4924	Steadfast ATZ	L	H	4802	Sterling
L	H	4320	Stinger 3 EC	L	F	7513	Stratego
D	I	1394	Sulfur 92%	D	H	4515	Surpass EC
L	H	4577	Surpass 20 G	L	H	4516	Surpass 100
L	H	4104	Sutan+ 6.7 E	L	H	4516	Surpass 100

Conversion Factors for Liquid and Dry Products

Liquid Products

1 Gallon = 4 Quarts

1 Quart = 2 Pints

1 Pint = 16 Fluid Ounces

2 Cups = 1 Pint

Dry Products

1 Pound = 16 Dry Ounces

1 Ounce = 28.3 Grams

1 Pound = 453 Grams

PEST MANAGEMENT INFORMATION SOURCES

- 1 County, Cooperative, or University Extension Advisor, Publications or Demonstrations
- 2 Farm Supply or Chemical Dealer
- 3 Commercial Scouting Service
- 4 Independent Crop Consultant or Pest Control Advisor/Custom Applicator
- 5 Other Growers or Producers
- 6 Producer Associations, Newsletters or Trade Magazines
- 7 Electronic Information Services (*DTN, Internet, World Wide Web, etc.*)
- 8 Employee Pest Advisor
- 9 Other – (Specify: _____)
- 10 None – Operator used no **outside** information source

Section F, item 1

MACHINERY and IMPLEMENT CODES

PLOWS and DISKS

- 01 Chisel Plow (Big Ox)
- 02 Coulter Plow
(Coulter Chisel, Soil Saver, Soil Conserver)
- 03 Deep Ripper
(Knife, Bed knife, Slide)
- 04 Disk Plow

Moldboard

- 05 Regular
- 06 Two Way
- 07 Stubble-mulch
(Noble, Sweeps, Hoeme Plow, Muckeroy Plow)
- 08 Subsoiler
(Chisel, Ripper, V-ripper)
- 09 Disk-chisel
(Mulch Tiller)

Offset Disk

- 10 Heavy Disk
- 11 Light Disk
- 12 One-way Disk
(Disk Tiller)
- 13 Single Disk

Tandem Disk

- 14 Plowing
- 15 Regular
- 16 Paraplow

PACKERS

- 51 Culti-packer
(Pulverizer, Crow-foot, Serrated, Ring, Spiral)

Roller-packer

- 52 Attachment
- 53 Smooth & Flat

PLANTERS

- 111 Bedder-shaper Planter
- 112 Lister-bedder
- 113 No-till, Minimum Till,
(Ripper Planter)
- 114 Conventional,
Regular (Tye, Flex)
- 115 Air Delivery/vacuum
- 116 Ridge till

MISCELLANEOUS TILLAGE

- 61 Land-all, Do-all, Mix-n-till, Till-all
(Disk, Shovels, Reel & Spikes)
- 62 Mulch Treader, Picker,
Treader, Skew
- 63 Roto-tiller
- 64 Roterra (Roto-spike, Lely)
- 65 Sand-fighter
- 66 Soil Finisher
(Finishing Tool, Mulch Finisher
Tri-tiller, Task Master)
- 67 Root Crown Puller
- 68 Stalk Puller/Chopper

HARROWS (DRAGS)

- 30 Heavy Harrow
- 31 Field Conditioner
(Scratcher,
Seed Bed Conditioner,
Soil Conditioner,
Ground Hog)
- 32 Finishing
(Harrogator, Spiral, Roller,
Knives, Shanks, Pegs,
Smoothen)
- 33 Flex-tine Tooth
(Coil Tine)
- 34 Multi-weeder
(Cultivator & Harrow)
- 35 Rail, Pipe, Log, Plank
- 36 Rod Weeder
- 37 Roller (Culti-mulcher,
Pulvi-mulcher, Crumbler,
Packer-mulcher,
Packer & Shanks)
- 38 Spike Tooth
- 39 Spring Tooth
- 40 Powered Spike Tooth Harrow

BEDDERS-SHAPERS

- 41 Bedder (Shaper)
(Bedshaper, Crowder)
- 42 Bed Shaper
- Disk**
- 43 Hipper
- 44 Row
- 45 Float
- 46 Lister (Middle-buster)
- 47 Rorovator-bedder
- 48 Seedbed Roller
(Flat Roller)
- 49 Sub-soil Bedder
(Ripper-hipper)
- 50 Discovator

CULTIVATORS

- 21 Field Cultivator
(Regular Digger,
Triple K, Danish Tined,
Swedish Tined,
Incorporated, S-tine,
Cultivator,
Vibra-shank Harrow,
Lilliston Tiller)
- 22 Furrow-out
- 23 Rotary Hoe
(Crust Buster)

Row

- 24 Disk Sweep, Shovel
- 25 Rolling, Rotary

Field Cultivator

- 26 Heavy Duty
(Duckfoot Cultivator)
- 27 Marker
- 28 Fallow Master

FERTILIZER APPLICATORS

- 71 Aerial (Airplane)
- 72 Attachment to implement
- 73 Manure Spreader
- 74 Self-propelled
- 75 Truck Spreader
- Tractor Mounted**
- 76 Anhydrous
- 77 Dry
- 78 Liquid
- Trailer Mounted**
- 79 Anhydrous
- 80 Dry
- 81 Liquid

CHEMICAL APPLICATIONS

- 91 Aerial (Airplane)
- 92 Attachment to implement
- 93 Largest Self propelled
(or Large Truck)
- 94 Motocycle/atv Sprayer
- 95 Small Self-propelled
(Spra-coupe, Hi-cycle)
- 96 Small Truck (Skid Mounted)
- 97 Tractor Mounted
- 98 Trailer Mounted

LAND FORMING EQUIPMENT

- 171 Backhoe
- 172 Disk Border Maker
- 173 Ditch Closer
- 174 Ditcher
- 175 Levee Plow Disk
- 176 Quarter Drain Machine
- 177 Rear Mounted Blade
- 178 Corrugator
(Furrow Dicer, Dammar Dicer,
Dicer)
- 180 Land Plane Leveler
(Water Leveler)
- 181 Laser Planer, Laser Leveler
- 182 Gate Setter
- 183 Bull Dozer

DRILLS and SEEDERS

- 101 Aerial Seeding
- 102 Broadcast Seeder

Drill

- 103 Air Delivery
- 104 Lister Disk
- 105 No-till or minimum till
- 106 Plain
- 107 Press, Disk or Hoe

*For implement codes 171 – 183,
enter Total Hours Operated in the
column labeled Total Acres Covered.
Total Acres covered is not meaningful
for these implements.*

OTHER IMPLEMENTS

- 191 Burn Buggy
- 192 Chaff/straw Saver
- 193 Electric-discharge Weed Killer
- 196 Off-field Thresher
- 197 Rock Picker
- 198 Rock Windover or Rake
- 199 Rodent (Gopher) Killer
- 200 Roller Groover
- 201 Rubber-wheeled Weed Puller
- 202 Flail Shredder
- 203 Rotary Shredder
- 204 Silage Harvester
- 205 Stalk Shredder, Stalk Cutter
- 206 Swath Roller
- 207 Tractor or Truck–No
attachments
- 223 Flame Thrower

HARVESTING EQUIPMENT**Small Grains/Row Crops Combine**

- 121 Hillside
- 122 Self propelled, 2wd
- 123 Self-propelled, 4wd
- 124 Track
- 125 PTO/motor Mounted

Windrower-swather

- 126 (Grain/hay)PTO
- 127 (Grain/hay) self-propelled
- 133 Corn Picker
- 134 Hand Harvesting

MOWERS and BALERS

- 141 Amish Harvester

Bale Wagon

- 142 PTO
- 143 Self-propelled
- 144 Bale Loader

Baler

- 145 Motor Mounted
- 146 PTO (Large)
- 147 PTO (Small)
- 148 Self-propelled
- 149 Mower-chopper-Rotary
- 150 Conditioner/PTO
- 151 Self-propelled
- 152 Drum disk
- 153 Flail
- 154 Sickle

Rake

- 155 Dump
- 156 Side Delivery
- 157 Wheel
- 158 Stack Mower
- 159 Stacker, Automatic
- 160 Front End Loader

HAULING EQUIPMENT**Trailers**

- 194 General Purpose Wagon or Cart
- 195 Hay Wagon
- 208 Gravity Wagon
- 209 Grain Cart with Auger
- 221 Forage Wagon
- 222 Dump Wagon
- 220 Other Trailers

Trucks

- 301 Single Axle
- 302 Tandem Axle
- 303 Tri Axle
- 304 Semi
- 305 Other Trucks

PTO Power Take-off

WD Wheel Drive

SECTION G, IRRIGATION TYPE CODES

PRESSURE SYSTEMS	GRAVITY SYSTEMS
1 HAND-MOVE	10 SIPHON TUBE from unlined ditches
2 SOLID or PERMANENT SET	11 SIPHON TUBE from lined ditches
3 SIDE ROLL or WHEEL LINE	12 PORTAL SYSTEM from unlined ditches
4 CENTER PIVOT or LINEAR MOVE with sprinklers on main line	13 PORTAL SYSTEM from lined ditches
5 CENTER PIVOT or LINEAR MOVE with sprinklers below main line, but more than 2 feet above ground	14 ANY POLY PIPE SYSTEM
6 CENTER PIVOT or LINEAR MOVE with sprinklers less than 2 feet above ground	15 GATED PIPE (not poly pipe)
7 BIG GUN	16 IMPROVED GATED PIPE (surge flow or cablegation not poly pipe)
8 LOW FLOW IRRIGATION (drip, trickle or micro sprinkler)	17 SUBIRRIGATION
9 OTHER - SPECIFY	18 OPEN DISCHARGE FROM WELL or PUMP
	19 OTHER - SPECIFY

RUN-OFF CODES

- | | |
|-------------------------|---|
| Section G, item 10..... | <ul style="list-style-type: none"> 1 Retained at the end of the field? 2 Re-used to irrigate on the farm? 3 Collected in evaporation ponds on the farm? 4 Drained from the farm? 5 There is no runoff. |
|-------------------------|---|